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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/640,584

08/18/2000

YUJI KONNO

826.C1978

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06/10/2004

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EXAMINER

RAHIMI, IRAJ A

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/640,584

Applicant(s)

KONNO ET AL.

Examiner

(Iraj) Alan Rahimi

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 7-14, 18-24, 29-32, 37, 41-44, 47-53, 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helterline et al. (US patent 6,039,430) in view of Brown (US patent 5,621,539).

Regarding claim 1, Helterline discloses a printing system having an external apparatus for generating printing data corresponding to an image to be printed, and a printing apparatus for performing printing with a printhead on the basis of the printing data to be output from the external apparatus, wherein the printing apparatus comprises:

storage means (memory 38) for storing head information about the printhead; and
output means for outputting the head information (column 4, lines 7-26), and
the external apparatus comprises:

image processing means (Host 48) for processing the printing data;

and

setting means for setting a processing parameter for processing by said image processing means on the basis of the head information input by said input means (column 5, lines 18-32).

Art Unit: 2622

However, Helterline does not disclose an input means for inputting the head information. Brown discloses touch screen 105 on the monitor 110. Helterline and Brown are analogous art because they are from the same field of endeavor that is printing data generated from external apparatus. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to use the touch screen monitor of Brown to enter settings for processing of images with more ease and visually pleasing method.

Regarding claim 2, Helterline discloses the system according to claim 1, wherein the head information contains discharge amount information for each of a plurality of heads of the printhead and identification information unique to the printhead (column 5, lines 34-42).

Regarding claim 7, Helterline discloses the system according to claim 1, wherein the external apparatus and the printing apparatus are connected via a communication line 52, and said output means transmits the head information to the external apparatus via the communication line (Fig. 3).

Regarding claim 8, Helterline discloses the system according to claim 1, wherein the external apparatus and the printing apparatus are connected via a communication line 52, and said input means receives the head information from the printing apparatus via the communication line (Fig. 3).

Art Unit: 2622

Regarding claim 9, although, neither Helterline nor Brown disclose the system according to claim 1, wherein said output means outputs the head information to a printing medium, examiner does not consider this feature patentably distinct. Printing information related to equipment is well known, such as printing sender's facsimile number and name on a received facsimile.

Regarding claim 10, Brown discloses the system according to claim 1, wherein said input means includes a user interface displayed on a monitor (column 6, lines 6-8).

Regarding claim 11, Helterline discloses the system according to claim 1, wherein the printhead includes an inkjet printhead for discharging ink to perform printing (column 6, lines 6-8).

Regarding claim 12, Helterline discloses the system according to claim 1, wherein the printhead includes a printhead for discharging ink using thermal energy, and comprises a thermal energy transducer for generating thermal energy to be applied to the ink (column 6, lines 40-46).

Regarding claims 13, 23, 31, 43, 52, 60, 61 and 62 arguments analogous to those presented for claim 1, are applicable.

Regarding claims 14, 24, 32, 44, and 53 arguments analogous to those presented for claim 2, are applicable.

Art Unit: 2622

Regarding claims 18, 29, 37, 47, and 58 arguments analogous to those presented for claim 7, are applicable.

Regarding claims 19, 38 and 48 arguments analogous to those presented for claim 8, are applicable.

Regarding claims 20, 39 and 49 arguments analogous to those presented for claim 9, are applicable.

Regarding claims 30, 40 and 59 arguments analogous to those presented for claim 10, are applicable.

Regarding claims 21, 41 and 50 arguments analogous to those presented for claim 11, are applicable.

Regarding claims 22, 42 and 51 arguments analogous to those presented for claim 12, are applicable.

3. Claims 3-6, 15-17, 26-28, 34-36, 45-47 and 54-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helterline et al. (US patent 6,039,430) in view of Brown (US patent 5,621,539) and further in view of Spurr (US patent 6,644,544).

Regarding claim 3, Helterline discloses the system according to claim 2, wherein said setting means comprises management means for managing the discharge amount information and the identification information for the printhead in correspondence with each other (column 5, lines 34-42),

However, he does not disclose when identification information corresponding to the identification information contained in the head information input by said input means is not managed by said management means, said setting means sets a processing parameter of image processing for the printing data to be output to the printing apparatus. Spurr discloses in column 13, lines 55-67 that an operator can decide whether or not to use the operating instructions downloaded to memory. This can include the capability to restore default operating parameters to memory. Helterline and Spurr are analogous art because they are from the same field of endeavor that is printing art. Therefore, it would have been obvious to a person skilled in the art, at the time of invention to combine Spurr's default operating parameters with Helterline to reduce operator burden for data entry.

Regarding claim 4, Spurr discloses the system according to claim 1, wherein said output means outputs the head information at the same timing as input of a printing start instruction from the external apparatus (column 12, lines 44-52).

Regarding claim 5, Spurr discloses the system according to claim 1, wherein said output means outputs the head information at the same timing as exchange of the printhead (column 5, lines 33-46).

Art Unit: 2622

Regarding claim 6, Spurr discloses the system according to claim 1, wherein said output means outputs the head information at a timing based on mounting/dismounting of the printhead (column 12, lines 53-67 and column 13, lines 1-8).

Regarding claims 25, 33 and 54 arguments analogous to those presented for claim 3, are applicable.

Regarding claims 15, 26, 34, 45 and 55 arguments analogous to those presented for claim 4, are applicable.

Regarding claims 16, 28, 35, 46, and 57 arguments analogous to those presented for claim 5, are applicable.

Regarding claims 17, 27, 36 and 56 arguments analogous to those presented for claim 6, are applicable.

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bullock (US patent 5,699,091) discloses replaceable part with integral memory for usage.

Arthur (US patent 5,049,898) discloses printhead having memory element.

Art Unit: 2622

Cook (US patent 6,158,850) discloses on carrier secondary ink tank with memory and flow control.


Contact Information


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Iraj) Alan Rahimi whose telephone number is 703-306-3473.

The examiner can normally be reached on Mon.-Fri. 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Alan Rahimi
May 20, 2004


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